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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/355,953      | 10/07/1999  | JUNICHI HIKITA       | P806-9020           | 7155             |

7590 11/15/2005

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EXAMINER

FISCHEITTI, JOSEPH A

ART UNIT PAPER NUMBER

3627

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/355,953

Applicant(s)

HIKITA ET AL

Examiner

Joseph A. Fischetti

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3,9,11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,9,11,12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3,9,11,12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3: applicant recites that a data converting unit converts the cryptogram, but what to? Second, most important, and encompassing both claims 3 and 9, the comparator compares data which is represented by the first and second cryptograms. But, it cannot combine i.e. add the cryptograms, but only the data, e.g. numeric strings "101001011111", which they represent. Similarly in claim 9, the same problems exists, but in addition, the third combined cryptogram is nothing more than the summation of the first and second cryptograms, and hence it is correctly referred to as a third data value.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, and 9, 11, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. in view of Shi et al. (PCT pub date 2/6/97) and Oruc et al.

Takahashi et al. teach: a first cryptogram the wired logic circuit (col. 2 lines 56-67); the second cryptogram portion is read as the verification value 150 (third embodiment), and point changing means being the command decoder 20. However, there is no disclosure of a resultant third value cryptogram generated from the first and second. However, Shi et al. does teach resetting a smart card wherein a new or third code is printed on an IC card following a comparison between its codes A and B, or i.e. the first and second cryptograms. But this third code is generated from a random pool and not a resultant of the first and second cryptogram values. Oruc et al. does however teach generating a third value based upon a resultant of first and second codes. It would be obvious to modify the device in Takahashi et al. to include a resultant third cryptogram as taught by Shi et al. which is the resultant of the two other cryptogram values as taught by Oruc et al. the motivation being that the card will be self authenticating.

Re claim 9: the processor IC1 in Shi et al. is read as the comparing means and the wherein clause is deemed to have insufficient structure and thus is functional.

Re claims 11 and 12: the converted codes A/B in Shi et al. are deemed to be equivalents to the generated ones as both have randomness involved.

The combining of references is motivated by the following. First, the command decoder 20/210 does in Takahashi et al. decode a read command, and it supplies a read signal and an address signal to the read/write control logic 110. It does not create a third resultant value. Col. 6 lines 28 et seq. shows a motivation for changing an

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encryption to "avoid dishonestly without restriction". It doesn't change encryption, but rather suggests rewriting a logic circuit to include a different code. This leaves open the need to generate some sort of new code to avoid dishonest use of the card in Takahashi et al. Shi et al answers this problem by randomly generating a third code which does not effect the first and second codes which does not force the user to learn a new code each time it is used, see col. 1, lines 27-30. The motivation is clear from Shi et al. to maintain the first and second cryptograms to avoid having the make the user change his cryptogram every time he uses it. The generation of the third value from the first and second ones is suggested by Takahashi et al. in that both keys must match col. 8 lines 45 et seq. before a new value is created. While Takahashi et al. teach erasing the codes to prevent dishonest use, Oruc et al. which teaches a resultant value from two given codes, would be an obvious modification to motivation would be again to allow the user to keep his code without having to change it as taught by Shi et al.

The first portion is read as Takahashi et al. is read as the logic circuit col. 2, line 56, the second cryptogram is read as the verification value 150, the third portion is read as the decoder 20 /210 third embodiment.


It is noted that the use of the term "configured" in claim 3 renders the language following it merely functional. As such, the combination of Takahashi et al. in view of Shi et al. (PCT pub date 2/6/97) and Oruc et al. need only be capable of performing the function recited in that language, which it is. Likewise, in claim 9, Applicant has yet to positively indicate his intent to invoke 112 6<sup>th</sup> paragraph language for the means plus

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function language. Therefore, unless he does so in the next office action, the language following the means recitation will be read as merely functional language and the combination of Takahashi et al. in view of Shi et al. (PCT pub date 2/6/97) and Oruc et al. is deemed fully capable of performing these functions.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication should be directed to Joseph A. Fischetti at telephone number (703) 305-0731.

  
JOSEPH A. FISCHETTI  
PRIMARY EXAMINER

Joseph A. Fischetti  
Primary Examiner  
Art Unit 3627